

Amendments to the Claims

1. (Currently amended) A sputtering target ~~component~~ comprising a sputtering surface, at least 99 atomic% of the sputtering surface consisting of a single phase corresponding to a solid solution of two or more elements in elemental form; each of the two or more elements being selected from groups 1, 5, 6, 8, 9 and 10 of the periodic table, the target being configured for mounting within a physical vapor deposition apparatus.

2. (Currently amended) The sputtering target ~~component~~ of claim 1 wherein at least 99.9 atomic% of the sputtering surface consists of the single phase.

3. (Currently amended) The sputtering target ~~component~~ of claim 1 wherein an entirety of the sputtering surface consists of the single phase.

4. (Cancelled)

5. (Currently amended) The ~~physical vapor deposition~~ sputtering target of ~~claim 4- claim 1~~ having a total volume, and wherein at least 99 atomic% of the total volume consists of the single phase.

6. (Currently amended) The ~~physical vapor deposition~~ sputtering target of claim 4 wherein at least 99.9 atomic% of the total volume consists of the single phase.

7. (Currently amended) The ~~physical vapor deposition~~ sputtering target of claim 4 wherein an entirety of the total volume consists of the single phase.

8. (Currently amended) A thin film sputter-deposited over a semiconductive wafer from the sputtering target component of claim 1 wherein the two or more elements of the solid solution are other than a binary solution of Ta and Mo, the thin film comprising a single phase solid solution.

9. (Currently amended) The sputtering target component of claim 1 wherein the two or more elements include at least two elements selected from group 1 of the periodic table.

10. (Withdrawn) The sputtering target component of claim 1 wherein the two or more elements are selected only from group 1 of the periodic table.

11. (Withdrawn) A thin film sputter-deposited from the sputtering target component of claim 10.

12. (Withdrawn) The sputtering target component of claim 10 wherein the two or more elements consist of Cs and Rb.

13. (Currently amended) The sputtering target component of claim 1 wherein the two or more elements include at least two elements selected from group 5 of the periodic table.

14. (Currently amended) The sputtering target component of claim 1 wherein the two or more elements are selected only from group 5 of the periodic table.

15. (Currently amended) A thin film sputter-deposited from the sputtering target component of claim 14 comprising a single phase solid solution.

16. (Withdrawn) The sputtering ~~component~~ target of claim 14 wherein each of the two or more elements are selected from the group consisting of Ta, Nb, and V.

17. (Currently amended) The sputtering target component of claim 1 wherein the two or more elements include at least two elements selected from group 6 of the periodic table.

18. (Withdrawn) The sputtering target component of claim 1 wherein the two or more elements are selected only from group 6 of the periodic table.

19. (Withdrawn) A thin film sputter-deposited from the sputtering target component of claim 18.

20. (Currently amended) The sputtering target component of claim 1 wherein the two or more elements include at least two elements selected from groups 8, 9 and 10 of the periodic table.

21. (Withdrawn) The sputtering target component of claim 1 wherein the two or more elements are selected only from groups 8, 9 and 10 of the periodic table.

22. (Withdrawn) A thin film sputter-deposited from the sputtering target component of claim 21.

23. (Withdrawn) The sputtering target ~~component~~ of claim 21 wherein the solution is a binary combination selected from the group consisting of Fe/Os, Fe/Ru, Co/Ir, Co/Rh, Ir/Rh, Ni/Pd, Ni/Pt, Co/Ni and Pd/Pt.

24. (Currently amended) The sputtering target ~~component~~ of claim 1 wherein the solution is Ta/Mo.

25. (Currently amended) The sputtering target ~~component~~ of claim 1 wherein the solution is Ta/W.

26. (Withdrawn) The sputtering target ~~component~~ of claim 1 wherein the solution is Cr/Fe.

27. (Withdrawn) A sputtering component comprising a single phase solid solution comprising elemental Cu and elemental Ni.

Claims 28-41 (Canceled).

42. (Currently amended) The sputtering target ~~component~~ of claim 1 wherein the component has no single element present at an amount exceeding 95%, by weight.

43. (New) A thin film sputter-deposited over a semiconductive wafer from the sputtering target of claim 1 wherein the solid solution contains a binary solution of Ta and Mo, wherein Ta is present at less than 30 atomic %, the thin film comprising a single phase solid solution.

44. (New) A thin film sputter-deposited over a semiconductive wafer from the sputtering target of claim 1 wherein the solid solution contains a binary solution of Ta and Mo, wherein Ta is present at greater than 84 atomic %, the thin film comprising a single phase solid solution.